

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 115)

FOIL the expressions shown below:

1. $(7x - 3)(4x + 7)$

$$\begin{aligned} &(7)(4)x^2 + (7)(7)x + (-3)(4)x + (-3)(7) \\ &(28)x^2 + (49)x + (-12)x + (-21) \\ &28x^2 + 37x - 21 \end{aligned}$$

2. $(6x - 8)(-8x - 8)$

$$\begin{aligned} &(6)(-8)x^2 + (6)(-8)x + (-8)(-8)x + (-8)(-8) \\ &(-48)x^2 + (-48)x + (64)x + (64) \\ &-48x^2 + 16x + 64 \end{aligned}$$

3. $(3x + 5)(5x - 5)$

$$\begin{aligned} &(3)(5)x^2 + (3)(-5)x + (5)(5)x + (5)(-5) \\ &(15)x^2 + (-15)x + (25)x + (-25) \\ &15x^2 + 10x - 25 \end{aligned}$$

4. $(5x + 4)(9x - 2)$

$$\begin{aligned} &(5)(9)x^2 + (5)(-2)x + (4)(9)x + (4)(-2) \\ &(45)x^2 + (-10)x + (36)x + (-8) \\ &45x^2 + 26x - 8 \end{aligned}$$

5. $(7x + 3)(2x - 2)$

$$\begin{aligned} &(7)(2)x^2 + (7)(-2)x + (3)(2)x + (3)(-2) \\ &(14)x^2 + (-14)x + (6)x + (-6) \\ &14x^2 - 8x - 6 \end{aligned}$$

FOIL the expressions shown below:

6. $(-9x + 3)(6x - 2)$

$$\begin{aligned} &(-9)(6)x^2 + (-9)(-2)x + (3)(6)x + (3)(-2) \\ &(-54)x^2 + (18)x + (18)x + (-6) \\ &-54x^2 + 36x - 6 \end{aligned}$$

7. $(-9x + 5)(-9x - 6)$

$$\begin{aligned} &(-9)(-9)x^2 + (-9)(-6)x + (5)(-9)x + (5)(-6) \\ &(81)x^2 + (54)x + (-45)x + (-30) \\ &81x^2 + 9x - 30 \end{aligned}$$

8. $(-3x + 2)(-7x + 2)$

$$\begin{aligned} &(-3)(-7)x^2 + (-3)(2)x + (2)(-7)x + (2)(2) \\ &(21)x^2 + (-6)x + (-14)x + (4) \\ &21x^2 - 20x + 4 \end{aligned}$$

9. $(-9x + 3)(-3x + 8)$

$$\begin{aligned} &(-9)(-3)x^2 + (-9)(8)x + (3)(-3)x + (3)(8) \\ &(27)x^2 + (-72)x + (-9)x + (24) \\ &27x^2 - 81x + 24 \end{aligned}$$

10. $(-7x + 8)(8x + 3)$

$$\begin{aligned} &(-7)(8)x^2 + (-7)(3)x + (8)(8)x + (8)(3) \\ &(-56)x^2 + (-21)x + (64)x + (24) \\ &-56x^2 + 43x + 24 \end{aligned}$$